

CLAIMSWHAT IS CLAIMED:

1. A method for displaying information on the keys of a keyboard, comprising:
5 receiving a request to change the configuration of the keyboard from a first configuration to a second configuration;
determining information to display on the keys of the keyboard in the second configuration; and
displaying the information on the keys of the keyboard.

10 2. The method of claim 1, wherein displaying the information comprises displaying at least one Braille letter on the keys of the keyboard.

15 3. The method of claim 1, wherein each of the keys includes a key cap and a matrix of pins, wherein displaying the information comprises raising one or more pins of the matrix above the key cap of the keys to form one or more Braille letters.

20 4. The method of claim 1, wherein receiving the request comprises receiving the request to change the configuration to a Braille configuration mode.

25 5. The method of claim 1, wherein each of the keys includes a matrix of light emitting devices, wherein displaying the information comprises activating one or more light emitting devices of the matrix to display the information.

6. The method of claim 1, wherein each of the keys includes a display panel, wherein displaying the information comprises activating one or more pixels of the display panel to display the information.

30 7. The method of claim 6, wherein displaying the information comprises displaying at least one of graphics or video on the display panel of the keys of the keyboard.

8. The method of claim 1, wherein the keyboard includes a configuration panel, wherein receiving the request to change the configuration of the keyboard comprises detecting a user selection of an option from the configuration panel.

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9. The method of claim 1, wherein receiving the request to change the configuration of the keyboard comprises receiving the request from a processor-based system coupled to the keyboard.

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10. A keyboard, comprising:

at least one key, wherein the key is adapted to display at least two symbols;
and

a control unit adapted to display a first symbol on the key in a first mode and a second symbol on the key in a second mode.

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11. The keyboard of claim 10, wherein the key comprises a key cap and a plurality of light emitting devices associated with the key cap.

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12. The keyboard of claim 10, wherein the key comprises a display panel having one or more pixels.

13. The keyboard of claim 12, further comprising an input interface to receive at least one of graphics data and video data.

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14. The keyboard of claim 13, wherein the control is adapted to display the graphics data or video data on the display panel of a plurality of keys.

15. The keyboard of claim 10, wherein the control is adapted to receive a request to change to the second mode.

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16. The keyboard of claim 10, further comprising a configuration panel adapted to allow a user to operate the keyboard in at least one of the first and second mode.

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Substantially

17. The keyboard of claim 10, wherein the keyboard includes a character map stored in a memory unit and wherein the control unit is adapted to display the first symbol on the key in the first mode and the second symbol on the key in the second mode based on the information stored in the character map.

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18. The keyboard of claim 10, wherein the key comprises a key cap and a plurality of pins and wherein one or more of the pins are capable of being raised above the key cap.

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19. The keyboard of claim 10, wherein each pin comprises a sleeve having an upper coil and a lower coil adapted to raise or lower the pin.

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20. An article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to:

display information on one or more keys of a keyboard in a first mode;

receive a request to operate the keyboard in a second mode;

display information on the keys of the keyboard based on the received configuration mode.

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21. The article of claim 20, wherein the instructions when executed enable the processor to display one or more Braille letters on the keys of the keyboard.

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22. The article of claim 21, wherein the instructions when executed enable the processor to raise one or more pins of a matrix of the keys to form one or more of the Braille letters.

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23. The article of claim 20, wherein the instructions when executed enable the processor to activate one or more light emitting devices of a matrix to display one or more symbols.

24. The article of claim 20, wherein the instructions when executed enable the processor to activate one or more pixels of a display panel of the keys to display at least one symbol.

25. The article of claim 20, wherein the instructions when executed enable the processor to receive the request from a processor-based system coupled to the keyboard.

26. An apparatus, comprising:

5 a key including a matrix of display elements for displaying information on the key; and

a control unit adapted to:

determine information to display on the key;

10 activate the matrix of display elements of the key to display the determined information;

detect the selection of the key; and

15 provide the information displayed on the key to the processor-based system in response to detecting the selection of the key.

27. The apparatus of claim 26, wherein the key comprises a matrix of light emitting devices.

28. The apparatus of claim 26, wherein the controller is further adapted to cause 20 the provided information to be displayed on a monitor of the processor-based system.

29. The apparatus of claim 26, wherein the key comprises a matrix of pins capable of rising above a top surface of the key.

25. The apparatus of claim 29, wherein the key comprises a housing for one or more of the pins of the matrix and wherein the housing comprises an upper coil for causing the pins to rise above the top surface of the key.

30. The apparatus of claim 30, wherein the sleeve comprises a magnetically movable object positioned below the pins, wherein the movable object is adapted to rise in response to the upper coil being energized.

b6 b7c 32 The apparatus of claim 31, wherein the movable object falls to a preselected level based on determining that the upper coil of the pin is not charged and wherein a top portion of the pin is substantially aligned with the top surface of the key when the movable object falls to the preselected level.